

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-009140**Date Inspected:** 14-Sep-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Xu Yumin**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Segments**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Dan Hernandez was present during the times noted above to observe the fit up, welding and related activities associated with the fabrication of the San Francisco Oakland Bay Self Anchored Suspension Bridge at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

OBG Trial Assembly Yard

Segment 5BE

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a fillet weld joint. The Weld joint is designated as FB018-001-128. The welder is identified as #048659 and was observed welding in the 4F (overhead) position using approved Welding Procedure Specification WPS-B-P-2114-TC-U4B-FCM-1.

Segment 5BW

This QA Inspector observed grinding on the profile of the CJP splice weld on the FL3 web plate to flange for the lower hold back weld at panel point 34.

Segment 1AW/1BW

This QA Inspector observed 3 locations marked as ZPMC Ultrasonic Testing (UT) rejectable indications had been

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excavated in the side plate transverse splice on the counter weight side. Y locations are 6770mm, 7080mm and 10080mm, locations were mapped out by ZPMC personnel from counter weight edge.

## Segment 1AAW/1AW

This QA Inspector performed Magnetic Particle Testing (MT) on 3 excavations in the side plate transverse CJP segment splice weld # OBW1A-004 (cross beam side) for verification of transverse indications. ZPMC personnel gouged several layers approximately 2mm per layer, QA performed MT after each layer was gouged. Y locations measured from cross beam side Edge Plate are as follows: 2620mm, 3023mm and 3223mm. See attached photos.

## Plate Yard

This QA Inspector selected six (6) 460mm x 355mm plate check samples and assigned a QA Lot number to each of following sampled material:

Item 693: 100mm A709M-345F2-X-Z25, HT# 09102583N0, Lot# B222-071-09

Item 694: 100mm A709M-345F2-X-Z25, HT# 09302334N3, Lot# B222-072-09

Item 695: 45mm A709M-345F2-X, HT# 09304088N2, Lot# B222-076-09

Item 696: 35mm A709M-345F2-X, HT# 09304152N3, Lot# B222-073-09

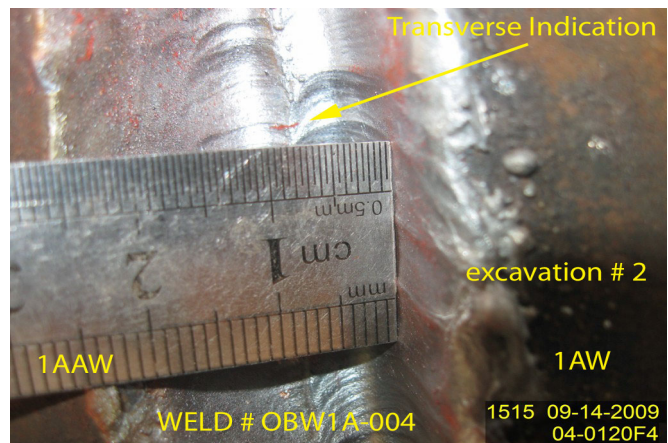
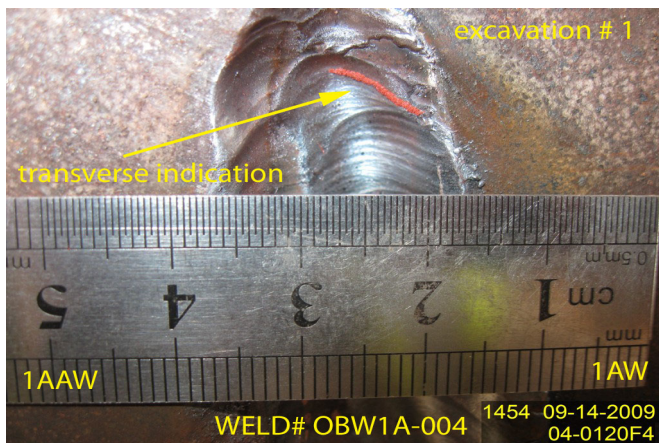
Item 697: 35mm A709M-345F2-X, HT# 09304164N3, Lot# B222-074-09

Item 698: 35mm A709M-345F2-X, HT# 09304180N3, Lot# B222-075-09

Samples were marked with Lot number, Item number, material thickness, date and direction of rolling. Samples will be shipped to an Independent Testing lab.

ZPMC Quality Control (QC) Inspector is identified as Chen Bo. QA Inspector observed QC Inspector verify welding parameters. The welding variables recorded by QC appeared to comply with the Applicable WPS.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

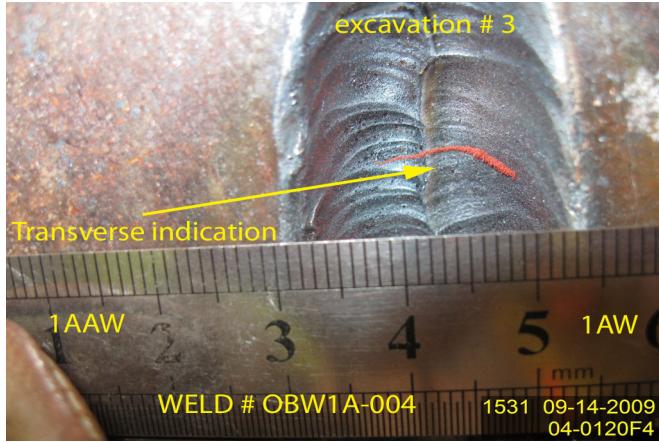


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## Summary of Conversations:

No relevant conversations.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 150-0042-2372 , who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Hernandez,Dan
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Quality Assurance Inspector
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<b>Reviewed By:</b>	Carreon,Albert
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QA Reviewer
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